



TOXNET:

Toxicology & Environmental Information

<http://toxnet.nlm.nih.gov/>

**United States
National Library
of Medicine**

TOXNET
Toxicology Data Network




TOXNET PDA Access

SIS Home | About Us | Site Map & Search | Contact Us

► Env. Health & Toxicology ► TOXNET

TOXNET - Databases on toxicology, hazardous chemicals, environmental health, and toxic releases.

Select Database	Search All Databases	Env. Health & Toxicology
<ul style="list-style-type: none">• ChemIDplus ?• HSDB ?• TOXLINE ?• CCRIS ?• DART ?• GENETOX ?• IRIS ?• ITER ?• LactMed ?• Multi-Database ?• TRI ?• Haz-Map ?• Household Products ?• TOXMAP ?	<div>Enter term(s) to search all databases.</div> <div><input type="text"/></div> <div>(e.g. asthma air pollution, ibuprofen fever, vinyl chloride)</div> <div>Search Clear Help</div> <div>TOXNET Search Options<ul style="list-style-type: none">• Search all databases: Enter term(s) in box above• Search a specific database: Click database at left• Database description: Click on the ?</div>	<div>Portal to environmental health and toxicology resources VISIT SITE</div> <div>Support Pages<ul style="list-style-type: none">► Help► TOXNET FAQ► TOXNET Update Status► Fact Sheet► Database Description► Training Manual & Schedule► News</div>

National Network of Libraries of Medicine, South Central Region
Houston Academy of Medicine-Texas Medical Center Library
1133 John Freeman Blvd.
Houston, TX 77030

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TOXNET (TOXicology Data NETwork)

<http://toxnet.nlm.nih.gov/>

- A **FREE** web-based integrated system of databases on toxicology, environmental health, hazardous chemicals, toxic releases, chemical nomenclature, and specialty areas such as occupational health and consumer products
- A product of NLM's Toxicology and Environmental Health Information Program (TEHIP)

Five Types of Databases

1. Chemical Information:
ChemIDplus
2. Toxicology Data Files (one record per chemical):
 - a. HSDB
 - b. CCRIS
 - c. GENE-TOX
 - d. IRIS
 - e. ITER
 - f. LactMed
3. Toxicology Literature Files (bibliographic references):
 - a. TOXLINE
 - b. DART
4. Toxic Releases (chemicals into the environment)
 - a. TRI
 - b. TOXMAP
5. Other Databases:
 - a. Haz-Map
 - b. Household Products

Select Database	
• ChemIDplus	?
• HSDB	?
• TOXLINE	?
• CCRIS	?
• DART	?
• GENETOX	?
• IRIS	?
• ITER	?
• LactMed	?
• Multi-Database	?
• TRI	?
• Haz-Map	?
• Household Products	?
• TOXMAP	?

TOXNET Data Files

Hazardous Substances Data Bank (HSDB)

- From NLM
- Over 5,000 chemical records
- Toxicology of potentially hazardous chemicals
- Information on human exposure, industrial hygiene, emergency handling procedures, environmental fate and regulatory requirements
- Data from books, government documents, technical reports and selected primary literature
- Some data is compiled expressly for HSDB
- Peer reviewed by the Scientific Review Panel

Chemical Carcinogenesis Research Information System (CCRIS)

- From the National Cancer Institute (NCI)
- Over 9,000 chemical records
- Data and information on carcinogenicity, mutagenicity, tumor promotion, and tumor inhibition test results
- Data derived from studies cited in primary journals, current awareness tools, NCI reports, and other special sources
- Scientifically evaluated and fully referenced

Genetic Toxicology (GENE-TOX)

- From the U.S. Environmental Protection Agency (EPA)
- Note: GENE-TOX not updated since January 2000
- 3,214 Chemical Records
- Mutagenicity studies
- Data Structure – assay type, assay code, results, panel report, reference
- Selected literature was reviewed by scientific experts

Integrated Risk Information System (IRIS)

- From the EPA
- Contains EPA consensus scientific positions and quantitative values on cancer and non-cancer health effects that may result from lifetime oral or inhalation exposure to specific chemical substances in the environment
- About 550 chemical records
- Scientifically reviewed by groups of EPA scientists and represent EPA consensus

International Toxicity Estimates for Risk Assessment (ITER)

- From Toxicology Excellence for Risk Assessment (TERA), a non-profit corporation
- Provides a comparison of international risk assessment information derived by different organizations (U.S. and International)

- About 650 chemical records
- Includes synopses, links to organization source documents

LactMed

- From NLM
- Database of drugs and other chemicals to which breastfeeding mothers may be exposed and the possible effects in nursing infants
- About 800 records
- Peer-reviewed and fully referenced

Searching TOXNET

- Each TOXNET database may be searched individually or by using the **Search All Databases** option (record counts may vary somewhat when databases are searched individually)
- The databases employ very similar search engines. Search techniques for **Search All Databases** can be used for each database

Searching All Databases

- Search by chemical names, other terms (including multiple terms), and numbers (including CAS numbers)
- Search results display a summary of the number of records retrieved in each database

Select Database

- ChemIDplus
- HSDB
- TOXLINE
- CCRIS
- DART
- GENETOX
- IRIS
- ITER
- LactMed
- Multi-Database
- TRI
- Haz-Map
- Household Products
- TOXMAP

Additional Resource

- CPDB

Env. Health & Toxicology

Portal to environmental health and toxicology resources.

[VISIT HERE](#)

Support Pages

Search All Databases

(e.g. asthma air pollution, ibuprofen fever, vinyl chloride)

References from Biomedical Literature		
TOXLINE	Toxicology Literature Online	18733
DART	Developmental Toxicology Literature	275

Chemical, Toxicological, and Environmental Health Data		
ChemIDplus	Chemical Identification/Dictionary	1
HSDB	Hazardous Substances Data Bank	962
CCRIS	Chemical Carcinogenesis Information	1
CPDB	Cancer Prevention Database	0
GENETOX	Genotoxicity Data Bank	1
IRIS	Integrated Risk Information System	3
ITER	International Toxicology Reference Database	2
LactMed	Lactation Medication Database	0
TRI	Toxics Release Inventory	2360
TOXMAP	Environmental Health e-Maps	Map It
Haz-Map	Occupational Exposure/Toxicology	Show me
Household Products	Health & Safety Information on Household Products	Show me

Clicking on the number takes you into that database

TOXNET Data Files

Example: HSDB (Hazardous Substances Data Bank)

The screenshot shows the TOXNET Toxicology Data Network interface. On the left is a sidebar with navigation buttons: Save Checked Items, Sort, Details, History, Download, Modify Search, Basic Search, Browse Index, Help, and TOXNET Home. The main content area is titled 'HSDB Search Results' and shows a search for 'ammonia'. It indicates 962 results found. A red callout box highlights the 'AMMONIA' link in the first result, with the text 'Click on chemical name to access full record'.

- Results display best matches first

A vertical stack of navigation buttons from the TOXNET interface: Save Checked Items, Sort, Details, History, Download, Modify Search, Basic Search, Browse Index, Help, and TOXNET Home.

- **Saved Checked Items** option allows you to display selected records only
 - Check box next to record number(s)
 - Click **Saved Checked Items**
 - Click **Display Saved Items** to view only the selected records (this option is only displayed when records are selected)
- **Sort** allows selected records to be resorted in ascending or descending order. TIP: This is best used with **Saved Checked Items**
- **Details** displays the search strategy
- **History** displays your recent searches
- **Download** allows some or all of the records retrieved to be downloaded in brief or full format. TIP: This is best used with **Saved Checked Items**
- **Browse Index** opens the Browse the Index search screen

Full Record Display

- The Full Record Display for each TOXNET data file has a similar look and navigation

Hazardous Substances Data Bank
HSDB

Next Item Search Results Basic Search Details Other Files Modify Search
Download Limits Browse Index Help

TOXNET Home
Item 1 of 962
NATIONAL LIBRARY OF MEDICINE

Table of Contents
Contract all categories
Expand all categories
Select Clear

- ☐ [FULL RECORD](#)
- ☐ [BEST SECTIONS](#)
- ☒ [Human Health Effects](#)
 - ☐ [Human Toxicity Excerpts](#)
 - ☐ [Human Toxicity Values](#)
 - ☐ [Skin, Eye and Respiratory Irritations](#)
 - ☐ [Drug Warnings](#)
 - ☐ [Medical Surveillance](#)
 - ☐ [Populations at Special Risk](#)
 - ☐ [Probable Routes of Human Exposure](#)
- ☒ [Emergency Medical Treatment](#)
 - ☐ [Emergency Medical Treatment](#)
 - ☐ [Antidote and Emergency Treatment](#)
- ☒ [Animal Toxicity Studies](#)
 - ☐ [Non-Human Toxicity Excerpts](#)
 - ☐ [Non-Human Toxicity Values](#)

AMMONIA
CASRN: 7664-41-7

For other data, click on the Table of Contents

Human Health Effects:

Human Toxicity Excerpts:
SYMPTOMATOLOGY (**AMMONIA GAS** & WATER ONLY): 1. Vapors cause irritation of eyes & resp tract. High concn cause conjunctivitis, laryngitis, & pulmonary edema or pneumonitis. Sensation of suffocation ... induced by spasm of glottis or by laryngeal edema. 2. Contact with skin can cause burns & vesication. If squirted into eyes ... rise in intraocular pressure may mimic narrow-angle glaucoma. Corneal edema & semidilated fixed pupils ... /are/ typical. 4. If systemic absorption becomes extensive, coma may arise ... preceded by ... hypertonus & convulsions. [Gosselin, R.E., R.P. Smith, H.C. Hodge. Clinical Toxicology of Commercial Products. 5th ed. Baltimore: Williams and Wilkins, 1984., p. III-22] **PEER REVIEWED**

AMMONIA HAS A GREATER TENDENCY THAN OTHER ALKALIES TO PENETRATE & DAMAGE THE IRIS, & TO CAUSE CATARACT /IN SEVERE BURNS/. IRITIS MAY BE ACCOMPANIED BY HYPOPYON

- The search term(s) is highlighted in red in the full record
- Each database has the **Table of Contents** in the left frame and the full record in the right frame
- The **Table of Contents** includes quick links to the specific fields and categories within the record. Links include:
 - Human Health Effects (which is the default display in HSDB)
 - Emergency Medical Treatment
 - Animal Toxicity Studies
 - Environmental Fate and Exposure
 - Manufacturing/Use Information (includes the major uses of the substance and manufacturers)

Moving between Databases

- The **Other Files** button, located at the top of the results page, allows the search to be conducted in other TOXNET files

Other Files

- Boolean searching using AND, OR, and NOT is available
- Truncation using the asterisk (*) is allowed at the end of a word and will search any number of characters
- Phrase searching by quotation marks is allowed

- Clicking on the **Limits** button allows you to search specific fields in the record

Select Database

- ChemIDplus
- HSDB**
- TOXLINE
- CCRIS
- DART
- GENETOX
- IRIS
- ITER
- LactMed
- Multi-Database
- TRI
- Haz-Map
- Household Products
- TOXMAP
- TOXNET Home

Search HSDB

(e.g. antifreeze kidney failure, chromium compounds, 7718-54-9)

Search

Clear

Help


For chemicals, add synonyms and CAS numbers to search:

☒ Yes
 ☐ No

Limits

Browse the Index

Env. Health & Toxicology



Portal to environmental health and toxicology resources

VISIT SITE

Support Pages

- Help
- Fact Sheet
- Sample Record
- HSDB Scientific Review Panel
- TOXNET FAQ

Customizable search fields

Practice Exercises

1. What are the adverse effects of exposure to phenol?
2. What is lithium chromate used for?
3. Is coal tar a carcinogen?

TOXNET Literature Files

TOXLINE (TOXicology Literature onLINE)

- Bibliographic information on pharmacological, biochemical, physiological, environmental, and toxicological effects of chemicals and other agents on living systems
- Sources of information include: toxicology journals, technical reports, research projects and archival collections
- Over 4 million citations
- Links to PubMed citations

Developmental and Reproductive Toxicology/Environmental Teratology Information Center (DART/ETIC)

- Managed by NLM and funded by the EPA, the National Institute of Environmental Health Sciences (NIEHS), the National Center for Toxicological Research (NCTR) of the Food and Drug Administration (FDA), and NLM
- Bibliographic information on teratology and other aspects of developmental and reproductive toxicology
- Over 200,000 citations
- Links to PubMed citations

Searching TOXLINE

- NOTE: **TOXLINE** and **DART** employ very similar search engines. All search techniques for **TOXLINE** can be used for **DART**

The screenshot displays the TOXNET (Toxicology Data Network) website. At the top, there is a header with the NLM logo and navigation links. Below the header, a navigation bar includes links to 'Env. Health & Toxicology', 'TOXNET', and 'TOXLINE'. The main content area is divided into three columns:

- Select Database:** A list of databases including ChemIDplus, HSDB, TOXLINE (highlighted), CCRIS, DART, GENETOX, IRIS, ITER, LactMed, Multi-Database, TRI, Haz-Map, Household Products, TOXMAP, and TOXNET Home.
- Search TOXLINE:** A search form with a text input containing 'benzene bladder cancer', a search button, and options to include synonyms, CAS numbers, and PubMed records.
- Env. Health & Toxicology:** A section with a 'VISIT SITE' button and a link to the 'Portal to environmental health and toxicology resources'.
- Support Pages:** A list of links including Help, Fact Sheet, Sample Record, TOXNET FAQ, and Importing Citations into Reference Manager.
- Additional Resource:** A section with a link to CPDB.

- Search by chemical names, other terms (including multiple terms), and numbers (including CAS numbers)
- Adding synonyms and CAS numbers expands your search results.
- Including PubMed citations in the results is optional

Browse TOXLINE

hydrochloride

(e.g. asphalt fumes roofers, calcium aging, Neville DM autoimmune)

Search
Clear
Help

Browse index in TOXLINE Special:

☒ All Words
☐ MeSH Headings/Keywords
☐ Authors
☐ CAS Registry Number

Return to Basic Search

- **Browse the Index** allows browsing by terms, MeSH headings or Keywords, Authors or CAS number

- Review the results in the index
 - Check the appropriate term and click Select to retrieve citation results
- Click on the Up or Down button to scan the results

TOXNET

Toxicology Data Network

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 [About Us](#) |
 [Site Map & Search](#) |
 [Contact Us](#)

TOXLINE Browse Results

[▶ Env. Health & Toxicology](#) |
 [▶ TOXNET](#) |
 [▶ TOXLIN](#)

hydrochloride

Search
Clear
Return to Basic Search

☒ All Words
 ☐ MeSH Headings/Keywords
 ☐ Authors
 ☐ CAS Registry Number

Check one or more text words. Then click on SELECT.

Start of Text Word Browse: *hydrochloride*

Up
Down
Select

Check to Select	Number of Records	Index Term
<input type="checkbox"/>	26521	hydrochloride
<input type="checkbox"/>	1	hydrochloride;

- Click on the **Limits** button to limit your search. Type of **Limits** include:
 - Title or Author fields
 - Searching exact words or variants
 - Maximum number of results retrieved
 - Year of publication
 - Search by languages
 - TOXLINE components

Search TOXLINE

Add chemical synonyms and CAS numbers to search: ☒ Yes ☐ No

Include PubMed records: ☒ Yes ☐ No

Search fields:

- ☒ All fields
- ☐ Titles
- ☐ Authors (e.g., Smith H)

Search: ☐ exact words ☒ singular & plural forms ☐ word variants

Search records with: ☐ the phrase ☒ all words ☐ any words

Maximum records returned

Year of Publication:
 through

Only search documents added in the last months.

TOXLINE Components

All

ANEUPL

BIOSIS

CIS

CRISP

DART (non-PubMed)

Language

All

English

Afrikaans

Arabic

Armenian

Azerbaijani

To select more than one component, click while holding the CTRL (PC) or CMD (Mac) key.

TOXLINE Results

- Citations that are also found in PubMed will be displayed with an icon that will link directly to PubMed
- Each citation includes the database in brackets

PubMed Citation 

**Save
Checked Items**

Sort

Details

History

Download


Modify Search

Basic Search

Browse Index

Help

TOXNET Home






TOXNET

Toxicology Data Network

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TOXLINE Search Results

▶ [Env. Health & Toxicology](#) ▶ [TOXNET](#) ▶ [TOXLINE](#)

 [Print this page](#)
 [Search tips](#)
 [Find full text](#)


For chemicals, add synonyms and CAS numbers to search: ☒ Yes ☐ No

Include PubMed records: ☒ Yes ☐ No

Items 1 through 20 of 6688

Page 1 of 335. to page

records are sorted in [relevancy ranked](#) order and **not by date**.
Click on **Sort** to change the order of the retrieved records.

Select Record	record
1 <input type="checkbox"/>	Sulfuric acid Anonymous SIDS. Screening Information Data Set for High Production Volume Chemicals. (2003) 44 p [RISKLINE]
2 <input type="checkbox"/>	Size-resolved sulfuric acid mist concentrations at phosphate fertilizer manufacturing facilities in Florida. Hsu YM; Wu CY; Lundgren DA; Birky BK Ann Occup Hyg. 2007, Jan; 51(1):81-9. [The Annals of occupational hygiene] [PubMed] PubMed Citation 

Practice Exercise

1. Find citations to literature, journals or reports on environmental exposure to acetone in salons.
2. What are the effects of cocaine and alcohol usage on a fetus?

Toxic Releases Databases

Toxics Release Inventory (TRI)

- Set of publicly available databases containing information on releases of specific toxic chemicals and their management as waste
- Based on data submitted to the EPA from industrial facilities in U.S.
- Describe the releases of toxic chemicals into the environment annually (1987 – 2008)
- Data includes names and addresses of facilities, the amounts of toxic chemicals released to the air, water, land, or transfer to waste sites
- Over 1.5 million records

Select Database	Search TRI	Facility Names (Separate multiple entries with commas)
<ul style="list-style-type: none"> • ChemIDplus • HSDB • TOXLINE • CCRIS • DART • GENETOX • IRIS • ITER • LactMed • Multi-Database • TRI • Haz-Map • Household Products • TOXMAP • TOXNET Home 	<p>Chemical Name or CAS Registry Number</p> <p>toluene</p> <p>Search Clear Help</p> <p>Add synonyms and CAS numbers to search:</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>TRI Files:</p> <p>Select All</p> <p> <input checked="" type="checkbox"/> TRI2008 <input type="checkbox"/> TRI2007 <input type="checkbox"/> TRI2006 <input type="checkbox"/> TRI2005 <input type="checkbox"/> TRI2004 <input type="checkbox"/> TRI2003 <input type="checkbox"/> TRI2002 <input type="checkbox"/> TRI2001 <input type="checkbox"/> TRI2000 <input type="checkbox"/> TRI1999 <input type="checkbox"/> TRI1998 <input type="checkbox"/> TRI1997 <input type="checkbox"/> TRI1996 <input type="checkbox"/> TRI1995 <input type="checkbox"/> TRI1994 <input type="checkbox"/> TRI1993 <input type="checkbox"/> TRI1992 <input type="checkbox"/> TRI1991 <input type="checkbox"/> TRI1990 <input type="checkbox"/> TRI1989 <input type="checkbox"/> TRI1988 <input type="checkbox"/> TRI1987 </p> <p>Facility Names (Separate multiple entries with commas)</p>	<p>Facility Location (Separate multiple entries for state, city/state, or zip with commas. For example: NJ, DE, or Trenton/NJ, Houston/TX, or 21113, 21224.)</p> <p>Houston/TX</p> <p> <input type="radio"/> State <input checked="" type="radio"/> City/State <input type="radio"/> County/State <input type="radio"/> Zip </p> <p>TRI Reporting Form Type</p> <p> <input checked="" type="radio"/> Both Form R and Form A <input type="radio"/> Form R (long form) only <input type="radio"/> Form A (short form) only </p> <p>Standard Industrial Classification Code, North American Industry Classification System Code (Separate multiple entries with commas)</p> <p>Greater Than 0 lbs for None Selected</p> <p>Search Browse the Index</p>
<p>Additional Resource</p> <ul style="list-style-type: none"> • CPDB 		

- Search by chemical name or CAS number.
- Limit results to particular years, facilities, locations, Form type, SIC number and release amounts
- **Browse the Index** allows browsing by words, CAS numbers chemical names, facility names, or facility cities

- Results display in brief format with the facilities and chemical list
- The **Map it with TOXMAP** button displays the results in TOXMAP

Calculate Totals

Save Checked Items

Sort

Details

History

Download

Modify Search

New Search

Browse Index

Help

TOXNET Home

TOXNET

Toxicology Data Network

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TRI2008 Search Results

[Env. Health & Toxicology](#) | [TOXNET](#) | [TRI2008](#)

Please click on **Modify Search** button to modify TRI search strategy.

Items 1 through 20 of 25
Facility/Substance Names are unsorted.

Pages: [1](#) [2](#)

Select Record	Facility/Substance Name
1 <input type="checkbox"/>	BRENNTAG SOUTHWEST INC HOUS TON TOLUENE HOUSTON, TX
2 <input type="checkbox"/>	ASHLAND DISTRIBUTION CO TOLUENE HOUSTON, TX
3 <input type="checkbox"/>	PRECOAT METALS TOLUENE HOUSTON, TX
4 <input type="checkbox"/>	UNIVAR USA INC HOUSTON FM 529 TOLUENE HOUSTON, TX
5 <input type="checkbox"/>	COOK COMPOSITES & POLYMERS CO

- To find the total release of the chemical by facility, select the record and click on **Calculate Totals**. Results summarize the total amount released

TRI Calculation Results

Calculate Totals

Save Checked Items

Sort

Details

History

Download

Modify Search

New Search

Browse Index

Help

TOXNET Home

On-Site Environmental Release (Form R)	Pounds
Total Air Release	104,114
Total Water Release	17
Total Underground Injection Release	734
Total Land Release	11
Total Disposal (Environmental Release)	104,876
Off-Site Waste Transfer (Form R)	Pounds
Total Publicly Owned Treatment Works Transfer	5,372
Total Other Off-Site Locations Transfer	106,484
Total Off-Site Waste Transfer	111,856
Total Environmental Release and Off-Site Waste Transfer	216,732

There were also 3 [Form A](#) submissions that accounted for up to 1,500 pounds of production-related waste. (Includes all on- and off-site releases, recycling, energy recovery, treatment for destruction, etc.)

TOXMAP

- From NLM
- Provides maps of the United States to help users visually explore data from the EPA's Toxic Releases Inventory (TRI) and the Superfund National Priorities List (NPL)
- Displays air, water, and land releases as reported by US industrial facilities
- Search by chemical name, facility name and/or location

The screenshot shows the TOXMAP website interface. At the top is the NLM logo and the title "TOXMAP® Environmental Health e-Maps". Below this is a navigation bar with links: Home, TRI Facilities, TRI Releases, TRI Trends, Superfund, Combo, Search, Help, and Contact Us. A secondary bar includes Welcome, News, Accessibility, Fact Sheet, For Teachers, Tour, About, and Site Map. The main content area is divided into three sections. On the left is a "Quick Search" form with fields for "Select Dataset(s)" (checked for TRI and Superfund NPL), "Chemical Name" (benzene), "City" (houston), "State" (TX), and "ZIP [Lookup]". It includes "Search" and "Clear" buttons and links for "Choose a region..." and "More search options...". Below the form are links to "Search TOXNET® TRI" and several FAQ questions. The center section, titled "TOXMAP:® Environmental Health e-Maps", contains a paragraph about exploring on-site toxic releases and hazardous waste sites, a map of the United States with blue and red dots representing TRI facilities and Superfund NPL sites respectively, and a caption: "TRI facilities (blue) and Superfund NPL sites (red)". On the right is a "Find Toxic Releases & Hazardous Waste Sites" section with a "GO" button and a "More info" link. Below this are links to "Try the TOXMAP Widget", "Updated Superfund, NCI Mortality data", "Try the TOXMAP Toolbar", and "Subscribe to TOXMAP news feed". At the bottom right is a section titled "Environmental News from EPA:" with several news links.

United States National Library of Medicine

TOXMAP®
Environmental Health e-Maps

Home TRI Facilities TRI Releases TRI Trends Superfund Combo Search Help Contact Us

Welcome News Accessibility Fact Sheet For Teachers Tour About Site Map

Quick Search

Select Dataset(s):
☒ TRI ☒ Superfund NPL

Chemical Name
benzene

City
houston

State ZIP [Lookup]
TX

Search Clear

Choose a region...
More search options...

Search TOXNET® TRI

TOXMAP:® Environmental Health e-Maps

Use Quick Search or click on a map to explore on-site toxic releases and hazardous waste sites from the EPA's [Toxics Release Inventory \(TRI\)](#) and the [Superfund National Priorities List \(NPL\)](#).

TRI facilities (blue) and Superfund NPL sites (red).

Find Toxic Releases & Hazardous Waste Sites
Enter your ZIP:
GO
More info

Try the TOXMAP Widget

- [Updated Superfund, NCI Mortality data](#)
- [Try the TOXMAP Toolbar](#)

Subscribe to TOXMAP news feed

Environmental News from EPA:

- [EPA to remove hazardous wastes at Elizabeth Mining and Development property in Montrose County \(Colo.\)](#)
- [Rhode Island Airport Corp. and Contractors Fined for Reporting Violations at TF Green Airport](#)
- [EPA Reaches Major Milestone at Welsbach Superfund Site](#)

- Trend a chemical released by facility or location
- Links to HSDB and ATSDR information as well as TOXLINE searches
- Can include census and reference data on map

Searching TOXMAP

- To locate toxic releases in your area, type in your city and state into the quick search box and select the **Go** button

- Facilities reporting toxic releases will be displayed in a map

[Start over](#) **Search Results** [\[Edit Search\]](#) [\[Save Results ?\]](#) [TRI](#) [Superfund](#) [Start over](#)

Benzene (RN: 71-43-2)

TRI State Fact Sheets [?](#)
 -- [Google maps](#)
[Google earth](#)

Current State Air Quality [?](#)
 -- [Google maps](#)
[Google earth](#) [Print this map](#)

Map Other Data

- [US Census Data](#) [?](#)
- [Income Data](#) [?](#)
- [Health Data](#) [?](#)
- [Reference Data](#) [?](#)

Information about this Chemical

NLM Searches of [?](#)

- [Toxicology Databases](#)
- [Human Health Effects](#)
- [Manufacturing/Use Info](#)
- [Env. Fate / Exposure](#)
- [Occupational Exposure](#)
- [MedlinePlus®](#)

CDC Searches of [?](#)

- [Toxicology FAQ](#)
- [Health Assessments](#)
- [All CDC Documents](#)
- [More Information](#)

Health Risk Information [?](#)

- [CDC ToxFAQs](#)
- [NJ Hazardous Substance Fact Sheets](#)
- [California Proposition 65 Chemicals](#)

MAP DETAILS

[Hide TRI facilities list](#)
[Superfund site details](#) ☐
Facilities reporting to TRI [?](#)
 Page 1 of 4
 to page
 (32 releases total, sorted by on-site release amount)

1. [LYONDELL CHEMICAL CO](#)
2. [EQUISTAR CHEMICALS](#)
3. [GEORGIA GULF CHEMICALS & VINYL S LLC - PASADENA](#)
4. [SHELL CHEMICAL CO](#)
5. [EXXONMOBIL BAYTOWN CHEMICAL PLANT](#)
6. [HOUSTON REFINING LP](#)
7. [EXXONMOBIL REFINING & SUPPLY BAYTOWN REFINERY](#)
8. [TM DEER PARK SERVICES LP](#)
9. [SHELL OIL CO DEER PARK REFINING LP](#)
10. [ROHM & HAAS TEXAS INC](#)

MAP CONTROLS

TRI [?](#) [\[Save results\]](#)

- ☐ None
- ☐ Facilities : 2008
- ☒ Releases : 2008
- ☐ Trends

Superfund [?](#) [\[Save results\]](#)

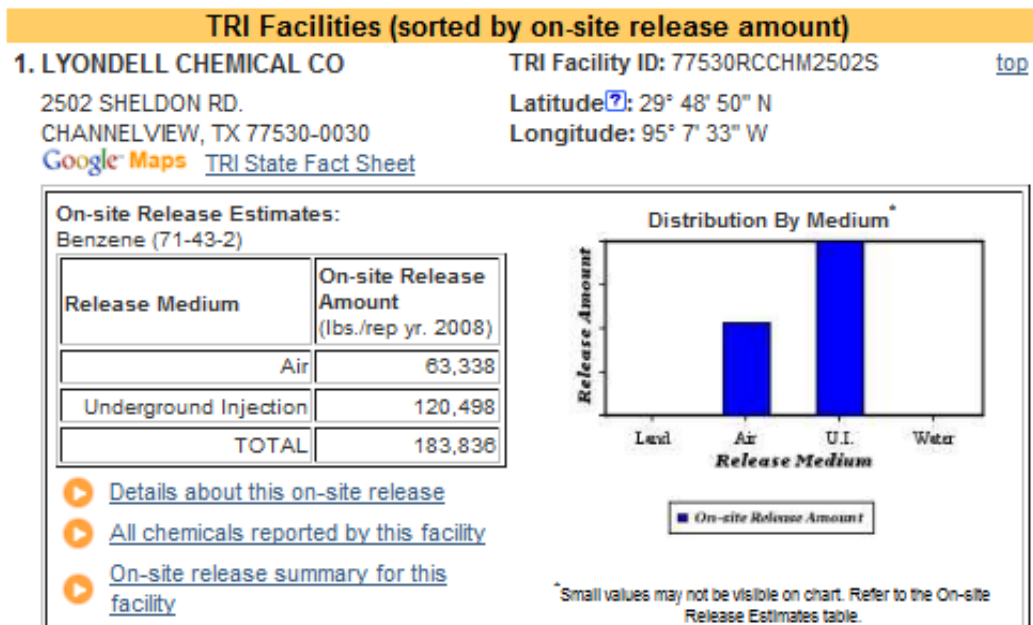
- ☐ None
- ☒ All NPL
- ☐ NPL Final
- ☐ NPL Deleted

Demographic [?](#)

- ☒ None
- ☐ Population Density - 2000

- Map Other Data** adds more criteria to the results, such as US Census information, income data, health data and geography details
- Custom regional areas, such as several states can be created
- Information about this chemical** links to other resources such as NLM and CDC databases are available
- Results may be viewed in Google Earth and Google Maps
- Map Controls** and **Legends** are below the map
- To identify the specific facilities, click on the **TRI on-site release details** link under the Map Details section
- To access information on a particular facility, click on the facility's name

- Details about other releases by this facility can be accessed



Other Databases

Haz-MAP

- From NLM
- Occupational health database designed for health and safety professionals and for consumers seeking information about the health effects of exposure to chemicals and biological substances at work
- Search or browse by agents, diseases, jobs, and activities and processes, including non-occupational activities
- Contains over 5,500 chemicals and 225 occupational diseases



Search as  Agent  Disease  Job  Text Search

[Haz-Map Search](#)

[More Searches](#)

[Haz-Map Help](#)

[Glossary](#)

[References](#)

Browse Haz-Map

- **Hazardous Agents**
 1. [By Types of Agents](#)
 2. [By Adverse Effects](#)
 3. [Alphabetically](#)
- **Occupational Diseases**
 1. [By Types of Diseases](#)
 2. [By Jobs and Symptoms](#)
 3. [Alphabetically](#)
- **High Risk Jobs**
 1. [By Types of Jobs](#)
 2. [Alphabetically](#)

[Haz-Map](#): Information on Hazardous Chemicals and Occupational Diseases
by
[Jay A. Brown](#), M.D., M.P.H.

- Links to PubMed, TOXNET and other related resources

Browse Haz-Map	
Agent Name	Azure blue
CAS Number	57455-37-5
Formula	Unspecified
Major Category	Dyes
Synonyms	C. I. 77007; C.I. Pigment Blue 29; Pigment Blue 29; Ultramarine (pigment); Ultramarine Blue; Ultramarine blue pigment; [ChemIDplus]
Category	Other Dyes
Description	An inorganic, reddish-blue powder pigment and one of the three synthetic ultramarines; The structure is a "three-dimensional aluminosilicate lattice" containing ionic sulfur groups. Azure blue is "derived from china clay by calcination." [Ullmann]
Sources/Uses	During the Middle Ages, ultramarine was used by artists as the "blue from over the sea." It was derived from the semiprecious stone, lapis lazuli, imported from Afghanistan. Since 1828 when it was first synthesized, the supply of the pigment has become abundant. Ultramarine pigments are used in plastics, paints, printing inks, paper, artist colors, laundry detergents (optical brightener), and toys. [Ullmann]
Comments	"A nuisance dust." [Sax] Safe in manufacture and use with the only known hazard being the evolution of hydrogen sulfide after contact with acid; it is not irritating, sensitizing, or mutagenic; [Ullmann]
Links to Other NLM Databases	
Toxicity Information	Search TOXNET
Chemical Information	Search ChemIDplus
Related Information in Haz-Map	
Processes	Industrial Processes with risk of exposure: <ul style="list-style-type: none"> • Painting (Pigments, Binders, and Biocides)
Activities	Activities with risk of exposure: <ul style="list-style-type: none"> • Painting

Household Products Database

- From NLM
- Information on potential health effects of chemicals or substances contained in more than 10,000 common household products
- Users can browse by a product category such as 'Pesticides' or by alphabetical listing of brand names
- Products can also be searched by type, manufacturer, product ingredient/chemical name and by health effects
- The complete Material Safety Data Sheets (MSDS) are available for products added since 2007
- Links to TOXNET, PubMed and other NLM databases



Searching Household Products Database

- To conduct a quick search, type in the name of the product, brand name or ingredient into the quick search box

- Search results will include the search term as an ingredient and as a text word in the product name

The screenshot shows the 'Household Products Database' interface. At the top, it says 'U.S. Department of Health & Human Services' and 'www.hhs.gov'. The database title is 'Household Products Database' with the subtitle 'Health & Safety Information on Household Products'. Navigation tabs include 'Home', 'Products', 'Manufacturers', 'Ingredients', and 'Health Effects'. On the left, there is a 'Quick Search' box with 'bleach' entered and a 'Go' button. Below it is an 'Advanced Search' link. A 'Browse by Category' list includes 'Auto Products', 'Inside the Home', 'Pesticides', 'Landscape/Yard', 'Personal Care', 'Home Maintenance', 'Arts & Crafts', 'Pet Care', and 'Home Office'. A 'Browse A-Z' list includes 'Products Names', 'Types of Products', 'Manufacturers', and 'Ingredients'. The main 'Search Results' section shows '3 record(s) found searching bleach as Ingredient' and '115 record(s) found searching bleach as Product (brand name or type of product)'. The ingredient results list three items: 'Bleach (unspecified)', 'Color safe oxygen bleach (sodium perborate and bleach activator)', and 'Cellulose, microcrystalline'. The product results list 115 items, with the first few being 'Ace with Bleach Laundry Detergent Powder-12/11/2007', 'Ace with Bleach Laundry Detergent Powder-Old Product', 'Ajax 2X Ultra Liquid Detergent with Bleach Alternative', 'Ajax Cleanser with Bleach-06/06/2007', 'Ajax Cleanser with Bleach-Old Product', 'All with Color Safe Bleaching Action-discontinued', 'Arm & Hammer Fabricare Advanced Detergent Action with Color Safe Bleach-Old Product', 'Arm & Hammer FabriCare Advanced Detergent Action with Color-Safe Bleach-06/24/2008', and 'Arm & Hammer Liquid Detergent with Color Safe Bleach Alternate-Old Product'.

- Select a record for more information about the product/item

- The detailed record includes information on the product, the manufacturer, health effects, handling/disposal, and ingredients
- Links within the record will access other NLM databases including PubMed and other TOXNET databases, and the MSDS (in some cases)

The screenshot shows the detailed record for 'Ajax Cleanser with Bleach-06/06/2007'. The 'Product Information' section includes: Product Name: Ajax Cleanser with Bleach-06/06/2007, Form: powder, Product Category: Inside the Home » Cleaner » bleach, Inside the Home » Kitchen » cleaner, Customer Service: 800-468-6502, Date Verified: 2008-01-02, Date Entered: 2007-12-28, and Related Items: [Products with similar usage in this database](#). The 'Manufacturer' section includes: Manufacturer: Colgate Palmolive Co., Address: 300 Park Avenue, City: New York, State: NY, Zip Code: 10022, Telephone Number: 212-310-2000, Fax Number: 212-310-3243, Toll Free Number: 800-468-6502, Date Info Verified: 2008-01-09, and Related Items: [Products by this manufacturer](#).


ChemIDplus

- Structure and name file used for the identification of chemical substances
- Contains over 378,000 chemical records, of which over 295,000 include chemical structures

Basic Search

- Search by substance name or CAS number

ChemIDplus - Dictionary of over 370,000 chemicals (names, synonyms, and structures). Includes links to NLM and other databases and resources.

Select Database	Search ChemIDplus	Env. Health & Toxicology
<ul style="list-style-type: none">• ChemIDplus• HSDB• TOXLINE• CCRIS• DART• GENETOX• IRIS• ITER• LactMed• Multi-Database• TRI• Haz-Map• Household Products• TOXMAP• TOXNET Home	<div><input type="text" value="water"/></div> <div><input type="button" value="Search"/> <input type="button" value="Clear"/></div> <p>Enter the name (e.g. formaldehyde) or registry number (e.g. 50-00-0) to search</p> <div>Advanced ChemIDplus Search</div> <p>Provides chemical structure, property, and toxicity searching.</p>	<div>Portal to environmental health and toxicology resources VISIT SITE</div> <div>Support Pages<ul style="list-style-type: none">▶ Help▶ Fact Sheet▶ Sample Record▶ TOXNET FAQ</div>

- For most chemicals there is one record and the system automatically retrieves that record
- If multiple records are retrieved, a list of names will displayed

Main Query Page

Next Page

Previous Page

Go To Record Number

TOXNET Home

Results: 1 - 2 of 2

1

[Water](#)
7732-18-5114198

2

[Water O 15 \[USAN\]](#)
24286-21-30

- The **Basic Information** buttons on the left of the results allow you to access the ChemIDplus **Full Record**, or a specific portion of the record, such as **Names & Synonyms, Formulas, Classification Codes, Registry Numbers, Notes, Toxicity** and **Physical Properties**
- The **Search Navigation** button on the right allows you to go back to a basic search (**Main Query Page**) or to the advanced search (**Advanced ChemIDplus Search**)

Water

RN: 7732-18-5

<div style="text-align: center; font-weight: bold;">Basic Information</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Full Record</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Names & Synonyms</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Formulas</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Classification Codes</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Registry Numbers</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Notes</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px;">Toxicity</div>	<p style="text-align: center;">For more information about this substance, you may select from the the links below.</p> <p><u>File Locator</u></p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> CCRIS ClinicalTrials.gov DART DailyMed DrugPortal EINECS EMIC GENETOX Household Products MeSH MeSH Heading MedlinePlusAll PubChem </td> <td style="vertical-align: top;"> i NCI Chem Carcino Res Info Sys i NIH ClinicalTrials.gov i Developmental and Reprod.Tox. i NLM/FDA Drug Labelling i NLM Drug Information Portal i EU Inv of Exist. Comm. Chem Sub i Env. Mutagen Info. Center i EPA GENetic TOXicology i Household Products Database i Medical Subject Headings File i Medical Subject Headings i Search Consumer Health Info i PubChem </td> </tr> </table>	CCRIS ClinicalTrials.gov DART DailyMed DrugPortal EINECS EMIC GENETOX Household Products MeSH MeSH Heading MedlinePlusAll PubChem	i NCI Chem Carcino Res Info Sys i NIH ClinicalTrials.gov i Developmental and Reprod.Tox. i NLM/FDA Drug Labelling i NLM Drug Information Portal i EU Inv of Exist. Comm. Chem Sub i Env. Mutagen Info. Center i EPA GENetic TOXicology i Household Products Database i Medical Subject Headings File i Medical Subject Headings i Search Consumer Health Info i PubChem
CCRIS ClinicalTrials.gov DART DailyMed DrugPortal EINECS EMIC GENETOX Household Products MeSH MeSH Heading MedlinePlusAll PubChem	i NCI Chem Carcino Res Info Sys i NIH ClinicalTrials.gov i Developmental and Reprod.Tox. i NLM/FDA Drug Labelling i NLM Drug Information Portal i EU Inv of Exist. Comm. Chem Sub i Env. Mutagen Info. Center i EPA GENetic TOXicology i Household Products Database i Medical Subject Headings File i Medical Subject Headings i Search Consumer Health Info i PubChem		
<div style="text-align: center; font-weight: bold;">Search Navigation</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Main Query Page</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px; margin-bottom: 5px;">Search Results Page</div> <div style="text-align: center; background-color: #d9e1f2; padding: 5px;">Advanced ChemIDplus Search</div>			

- The middle of the results page lists the **Locators** where further information on the chemical is found
- The **File Locators** point to NLM associated databases





Water
RN: 7732-18-5


For more information about this substance,
you may select from the the links below.

File Locator

CCRIS	i NCI Chem Carcino Res Info Sys
ClinicalTrials.gov	i NIH ClinicalTrials.gov
DART	i Developmental and Reprod.Tox.
DailyMed	i NLM/FDA Drug Labelling
DrugPortal	i NLM Drug Information Portal
EINECS	i EU Inv of Exist. Comm. Chem Sub
EMIC	i Env. Mutagen Info. Center
GENETOX	i EPA GENetic TOXicology
Household Products	i Household Products Database
MeSH	i Medical Subject Headings File
MeSH Heading	i Medical Subject Headings
MedlinePlusAll	i Search Consumer Health Info
PubChem	i PubChem
PubMed	i Biomedical Citations From PubMed
PubMed AIDS	i AIDS Citations from PubMed
PubMed Cancer	i Cancer Citations from PubMed
PubMed Toxicology	i Toxicology Citations From PubMed
RTECS	i Reg. of Toxic Eff. of Chem. Sub.
TOXLINE	i NLM TOXLINE on TOXNET


- **Internet Locators** link to web resources containing biomedical data
- **Superlist Locators** link to regulatory and scientific lists

<u>Internet Locator</u>	
CTD	 Comparative Toxicogenomics Database
ChEBI	 Chem Entities of Biological Interest
Drugs@FDA	 FDA Drug Database
EPA Envirofacts	 EPA Master Chemical Integrator
EPA HPVIS	 EPA High Prod Vol Info System
EPA SRS	 EPA Substance Registry System
IUCLID	 EU IUCLID Chemical Data Sheet
NIST WebBook	 NIST Chemistry WebBook
NTP DBS	 NTP Database Search
SRC CHEMFATE	 Syracuse Res. Corp. CHEMFATE
SRC DATALOG	 Syracuse Res. Corp. DATALOG
USA.gov	 USA.gov Search Engine
<u>Superlist Locator</u>	
CGB	 DOT Coast Guard Bulk Haz. Mat.
DSL	 Domestic Sub. List of Canada
INER	 EPA Pesticide Inert Ingredients
TSCAINV	 EPA Chem. Sub. Inventory

- Clicking on the Information icon  next to a Locator offers more information on the resource
- To view the results in any Locator, click on its name


Advanced Search (ChemIDplus Advanced)

- Search by chemical name, CAS number, molecular formula, classification code, locator code, structure or substructure, toxicity indicators, physical properties, and molecular weight
- Provides structural drawings that can be manipulated
- To use ChemIDplus Advanced, you will need a web browser that has a recent version of Java installed

Substance Identification [i](#) 

Name/Synonym Equals

Data is available for 389,355 records.

Toxicity [i](#) 


Test: (any) between (mg/kg or ppm)

Species: (any)

Route: (any)

Effect: (any)

Toxicity data is available for 139,354 records.


Physical Properties [i](#) 

Melting Point

between

Either Measurement Type


Physical property data was provided by [Syracuse Research Corporation](#) and is available for 25,461 records.

Locator Codes [i](#) 

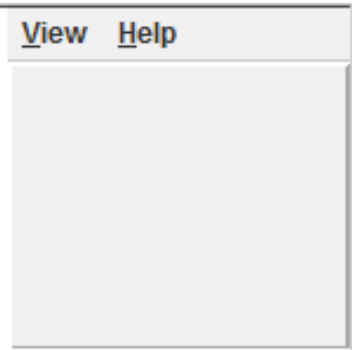
(any)

AND

(any)

Structure [i](#) 

[View](#) [Help](#)



Powered by [ChemAxon Marvin](#)

Structure Search Options [i](#)

☒ Substructure Search

☐ Similarity Search %

☐ Exact (parent only)


☐ Flex (parent, salts, mixture) **NEW**

☐ Flexplus (parent, all variations) **NEW**

Display structures using [i](#)

☒ Marvin ☐ Chime [Change](#)

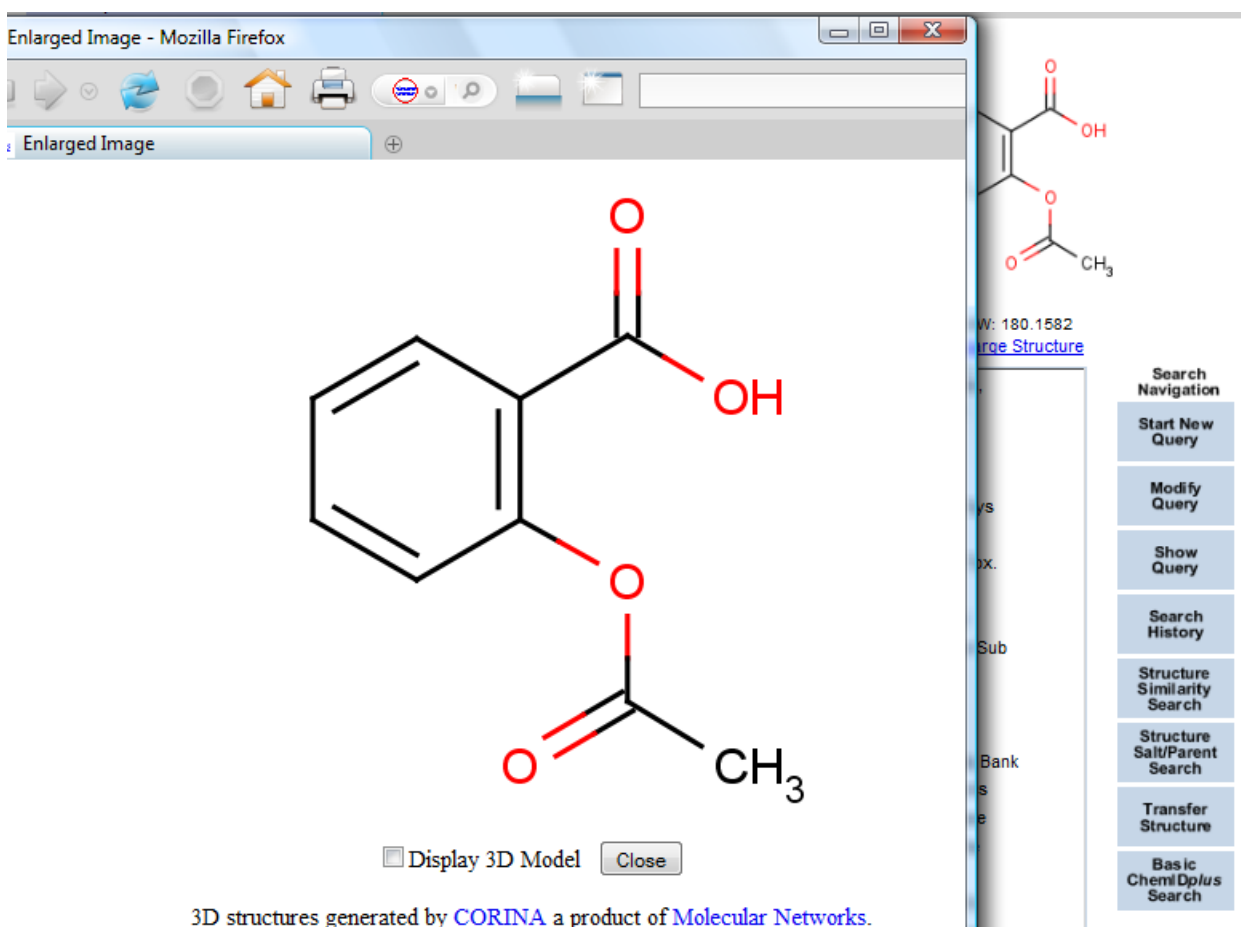
Structure data is available for 295,299 records.

Molecular Weight [i](#) 

between

Molecular weight data is available for 295,299 records.

- After clicking the **Enlarge Structure** link, you will be able to display a three-dimensional model of the structure



- **Structure Similarity, Structure Salt/Parent Search** and **Transfer Structure** copies the structure into the Advanced Search and allows for structure searching

Practice Exercises

1. Find the Mercury releases in Houston, Texas. Which facility has the highest amount of releases?
2. What are the acute health effects associated with Victor Roach Killing Powder?
3. Find the chemical structure for Furosemide